

IN THE CLAIMS

1. (Currently Amended) A damper assembly installed in a housing having a pair of side walls connected to a pair of end walls that define a conduit extending therethrough, the damper assembly including at least one damper blade movable from an open position to a closed position to control fluid flow through the conduit, the damper assembly comprising:

- (a) the at least one damper blade operating in a normally open position;
- (b) a biasing member urging the damper blade towards the closed position;
- (c) a retaining member in removable mechanical communication with the damper blade to maintain the damper blade in the open position against the biasing force until an occurrence of a predetermined condition that causes the damper blade to close; and
- (d) a latch mechanism disposed outside the conduit, the latch mechanism including a plate connected to the damper blade and further connected to a locking member that pivots relative to the plate to lock the damper blade with respect to blade movement towards the open position once the damper blade has closed.

2. (Original) The damper assembly as recited in claim 1, wherein the retaining member is a fusible link.

3. (Previously Presented) The damper assembly as recited in claim 2, wherein the fusible link fails upon an occurrence of the predetermined condition to allow the biasing force to close the damper blade.

4. (Original) The damper assembly as recited in claim 1, wherein the retaining member is heat sensitive.

5. (Previously Presented) The damper assembly as recited in claim 1, wherein the locking mechanism carries a latch member that engages a catch member to lock the damper blade.

6. (Previously Presented) The damper assembly as recited in claim 5, wherein the catch member is formed in a housing wall.

7. (Previously Presented) The damper assembly as recited in claim 6, wherein the locking member further comprises a hook that engages the catch member.

8. (Previously Presented) The damper assembly as recited in claim 7, wherein the catch member is stationary.

9. (Previously Presented) The damper assembly as recited in claim 1, further comprising a spring member biasing the locking member into interference with a catch member that is supported by the housing.

10. (Previously Presented) The damper assembly as recited in claim 1, wherein the blade is rotatably coupled to a shaft that is connected to the plate.

11. (Previously Presented) The damper assembly as recited in claim 10, further comprising a second blade rotatably coupled to a second shaft that is, in turn, coupled to the plate.

12. (Currently Amended) The damper assembly as recited in claim ~~6~~ 9, wherein the spring member is in mechanical communication with the blade at a first end, and in mechanical communication with the housing at a second end.

13. (Previously Presented) The damper assembly as recited in claim 12, wherein the spring is connected to the plate at one end, and to one of the side walls at the second end.

14. (Previously Presented) The damper assembly as recited in claim 1, wherein the damper blade rotates about an axis defined by a shaft that is connected to the plate.

15. (Previously Presented) The damper assembly as recited in claim 1, wherein the latch mechanism is mounted to an outer surface of the housing.

16. (Previously Presented) The damper assembly as recited in claim 1, wherein the biasing force is provided by a spring member operably connected between the blade and the housing.

17. (Previously Presented) The damper assembly as recited in claim 1, wherein the plate pivots about an axis and the locking member is connected to the plate at a location spaced from the axis.

18. (Currently Amended) A damper assembly installed in a housing having a pair of side walls connected to a pair of end ~~wells~~ walls that define a conduit extending therethrough, wherein the damper is movable from an open position to a closed position to control fluid flow through the conduit, the damper assembly comprising:

(a) at least one damper blade operating in a normally open position;

(b) a biasing member applying a force to the damper blade biasing the blade towards the closed position;

(c) a retaining member in removable mechanical communication with the damper blade to maintain the damper blade in the open position against the biasing force until an occurrence of a predetermined condition; and

(d) a latch mechanism including a plate coupled to the damper blade such that the plate pivots in response to blade rotation, the latch mechanism further including a locking mechanism pivotally connected to the plate that carries a latch member and causes the latch member to engage a catch member to resist movement of the damper blade towards the open position once the damper blade has closed, wherein one of the latch member and the catch member is stationary.

19. (Original) The damper assembly as recited in claim 18, wherein the retaining member is a fusible link.

20. (Original) The damper assembly as recited in claim 18, wherein the fusible link fails upon an occurrence of a predetermined condition, and wherein the biasing force closes the damper blade when the fusible link fails.

21. (Original) The damper assembly as recited in claim 18, wherein the retaining member is heat sensitive.

22. Cancelled

23. Cancelled

24. (Previously Presented) The damper assembly as recited in claim 18, further comprising a spring member that biases the latch member into interference with the catch member.

25. (Previously Presented) The damper assembly as recited in claim 24, wherein the plate pivots about an axis and the locking member is connected to the plate at a location spaced from the axis.

26. (Previously Presented) The damper assembly as recited in claim 25, wherein the axis is aligned with an axis of blade rotation.

27. (Previously Presented) The damper assembly as recited in claim 18, wherein the blade is rotatably coupled to a shaft that is connected to the plate.

28. (Previously Presented) The damper assembly as recited in claim 27, further comprising a second blade rotatably coupled to a second shaft that is, in turn, rotatably coupled to the plate.

29. (Previously Presented) The damper assembly as recited in claim 18, wherein the biasing member comprises a spring operably connected between the plate and the housing.

30. (Previously Presented) The damper assembly as recited in claim 29, wherein the spring is in mechanical communication with the plate at one end, and supported by the housing at a second end.

31. (Previously Presented) The damper assembly as recited in claim 30, wherein the spring is connected to the plate at one end, and to one of the side walls at a second end.

32. (Previously Presented) The damper assembly as recited in claim 18, wherein the damper blade rotates about an axis defined by a shaft that is connected to the plate.

33. (Previously Presented) The damper assembly as recited in claim 18, wherein the latch mechanism is mounted to an outer surface of the housing.

34. (Previously Presented) The damper assembly as recited in claim 18, further comprising a spring member that biases the latch mechanism toward a position causing the latch member to engage the catch member.

35-40. Cancelled

41. (Currently Amended) A method for operating a damper assembly of the type having at least one damper blade installed in a housing having a pair of side walls connected to a pair of end wells walls that define a conduit extending therethrough, wherein the blade is held in an open position by a retaining member:

(A) causing the retaining member to fail;

(B) biasing the blade to a closed position to block the conduit with respect to fluid flow; and

(C) pivoting a plate that is connected to the damper blade from a first to a second position along with damper blade movement; and

(D) engaging mating members by pivoting a locking member relative to the plate to which the locking member is connected in order to resist blade movement from the closed position towards the open position.

42. (Previously Presented) The method as recited in claim 41, wherein the retaining member is a heat-sensitive fusible link, and wherein step (A) further comprises breaking the fusible link.

43. (Previously Presented) The method as recited in claim 41, wherein step (D) further comprises engaging a latch member with a catch member.

44. (Previously Presented) The method as recited in claim 43, wherein step (C) further comprises pivoting the plate relative to the housing.

45. (Previously Presented) The method as recited in claim 44, wherein step (C) further comprises pivoting the plate along with the damper blade.

46. (Previously Presented) The method as recited in claim 44, wherein step (D) further comprises engaging the latch carried by the locking member to the catch formed in a housing wall.

47. (Previously Presented) The method as recited in claim 46, wherein step (D) further comprises engaging a latch carried by the locking member with a catch carried by the housing.

48. (Previously Presented) The method as recited in claim 47, wherein step (D) further comprises biasing the latch in engagement with the catch via a spring coupled between the plate and the locking member.

49. (Previously Presented) The method as recited in claim 44, wherein step (D) further comprises biasing the locking member toward a position whereby the latch member engages the catch member.

50. (Previously Presented) The method as recited in claim 41, wherein the damper assembly further comprises a spring operably connected between the plate and the locking member.

51. (Previously Presented) The method as recited in claim 41, wherein step (B) further comprises biasing the blade to the closed position via a spring coupled between the housing and the plate.

52. (Previously Presented) A latch assembly for a damper of the type that is installed in a housing defining an internal conduit and having a first blade and a second blade that can move in tandem from an open position whereby fluid is permitted to pass through the conduit, to a closed position whereby fluid flow through the conduit is restricted, the latch assembly comprising:

a first plate supported by the housing and coupled with the first blade; and

a second plate supported by the housing, coupled with the second blade, and further coupled with the first plate via a linkage supported by the housing at a location outside the conduit, the linkage being connected between the first and second plates outside the housing, wherein the second plate moves along with damper blade rotation and carries a locking member that pivots relative to the second plate to lock the damper blade with respect to blade movement towards the open position once the damper blade has closed.

53. Cancelled

54. (Previously Presented) The latch assembly as recited in claim 52, wherein locking member movement causes a latch member to engage a catch member.

55. (Previously Presented) The latch assembly as recited in claim 54, further comprising a spring member that biases the locking member towards a position that causes the latch to engage the catch.

56. (Previously Presented) The latch assembly as recited in claim 55, wherein the spring member is connected between the locking member and the second plate.

57. (Previously Presented) The latch assembly as recited in claim 55, wherein the latch is carried by the locking member.

58. (Previously Presented) The latch assembly as recited in claim 57, wherein the catch is carried by the housing.

59. (Previously Presented) The latch assembly as recited in claim 52, further comprising a spring member biasing the damper blades towards the closed position.

60. (Previously Presented) The latch assembly as recited in claim 52, wherein the spring member is connected between the second plate and the housing.

61. (Previously Presented) The latch assembly as recited in claim 52, further comprising a retaining member in removable mechanical communication with the damper blade to maintain the damper blade in the open position until an occurrence of a predetermined condition.

62. Cancelled

63. Cancelled

64. (Currently Amended) A damper assembly installed in a housing having a pair of side walls connected to a pair of end ~~wells~~ walls that define a conduit extending therethrough, wherein the damper is movable from an open position to a closed position to control fluid flow through the conduit, the damper assembly comprising:

(a) at least one damper blade operating in a normally open position;

(b) a biasing member applying a force to the damper blade biasing the blade towards the closed position;

(c) a retaining member in removable mechanical communication with the damper blade to maintain the damper blade in the open position against the biasing force until an occurrence of a predetermined condition; and

(d) a latch mechanism movably connected to the blade that causes a latch member and a catch member to engage to resist movement of the damper blade towards the open position once the damper blade has closed, the latch member being carried by the latch mechanism and the catch member being formed in a wall of the housing, wherein one of the latch member and the catch member is stationary.

65. Cancelled

66. Cancelled

67. Cancelled

68. (Currently Amended) A damper assembly installed in a housing having a pair of side walls connected to a pair of end ~~wells~~ walls that define a conduit extending therethrough, wherein the damper is movable from an open position to a closed position to control fluid flow through the conduit, the damper assembly comprising:

(a) at least one damper blade operating in a normally open position;

(b) a biasing member applying a force to the damper blade biasing the blade towards the closed position;

(c) a retaining member in removable mechanical communication with the damper blade to maintain the damper blade in the open position against the biasing force until an occurrence of a predetermined condition; and

(d) a latch mechanism that causes a latch member to engage a catch member, the catch member being formed in a housing wall.

69. Cancelled

70. (Previously Presented) The damper assembly as recited in claim 68, wherein the latch mechanism further comprises a plate connected to the damper blade that causes the latch member to engage the catch member when the damper blade is closed.

71. (Previously Presented) The damper assembly as recited in claim 70, further comprising a locking member that carries the latch member and is pivotally connected to the plate.

72. (Previously Presented) The damper assembly as recited in claim 71, wherein the locking member is biased into an engaged position via a spring connected between the locking member and the plate.

73. (Currently Amended) A damper assembly installed in a housing having a pair of side walls connected to a pair of end ~~wells~~ walls that define a conduit extending therethrough, the damper assembly movable from an open position to a closed position to control fluid flow through the conduit, the damper assembly comprising:

(a) at least one damper blade operating in a normally open position;

(b) a biasing member urging the damper blade towards the closed position;

(c) a retaining member in removable mechanical communication with the damper blade to maintain the damper blade in the open position against the biasing force until an occurrence of a predetermined condition that causes the damper blade to close; and

(d) a latch mechanism including a plate connected to the damper blade and further carrying a locking member that attaches to a catch member formed in a housing wall, the catch member being separate from the plate to resist movement of the damper blade towards the open position once the damper blade has closed, wherein a spring member, connected between the plate and the locking member, biases the locking member toward the engagement member.

74. Cancelled

75. Cancelled

76. Cancelled

77. (Currently Amended) The damper assembly as recited in claim ~~76~~ 73, wherein the locking member carries a latch member that engages a catch member.

78. (Currently Amended) A damper assembly installed in a housing having a pair of side walls connected to a pair of end ~~wells~~ walls that define a conduit extending

therethrough, the damper assembly movable from an open position to a closed position to control fluid flow through the conduit, the damper assembly comprising:

- (a) at least one damper blade operating in a normally open position;
- (b) a biasing member urging the damper blade towards the closed position;
- (c) a retaining member in removable mechanical communication with the damper blade to maintain the damper blade in the open position against the biasing force until an occurrence of a predetermined condition that causes the damper blade to close;
- (d) a latch mechanism disposed outside the conduit, the latch mechanism movably connected to the blade that causes mating members to engage and resist movement of the damper blade from the closed position towards the open position; and
- (e) a spring member biasing one of the mating members against the other mating member.

79. (Previously Presented) The damper assembly as recited in claim 78, wherein the latch mechanism further comprises a plate that rotates along with the damper blade to bring the mating members into engagement.

80. (Previously Presented) The damper assembly as recited in claim 79, wherein the plate carries a locking member that includes one of the mating members.

81. (Previously Presented) The damper assembly as recited in claim 80, wherein the spring is connected between the plate and the locking member.

82. (Previously Presented) The damper assembly as recited in claim 81, wherein the locking member carries a latch member that engages a catch member formed in a housing wall.

83. (Previously Presented) A latch assembly for a damper of the type that is installed in a housing and having a blade that can move from an open position whereby fluid is permitted to pass through the housing, to a closed position whereby fluid flow through the housing is restricted, the latch assembly comprising:

- a plate supported by the housing and movably coupled with the blade from a first position to a second position, the plate carrying a first mating member; and
- a second mating member fixedly connected to the housing;

wherein plate movement to the second position interlocks the first and second mating members to resist blade movement from the closed position towards the open position.

84. (Previously Presented) The latch assembly as recited in claim 83, wherein the first mating member comprises a flange formed in the plate.

85. (Previously Presented) The latch assembly as recited in claim 84, wherein the second mating member flexes as it engages the flange.

86. (Previously Presented) The latch assembly as recite in claim 85, wherein the second mating member comprises a plate having a base connected to the housing and a bent section extending from the base, the bent section defining a distal end that engages the flange.